


United States
Fish & Wildlife Service

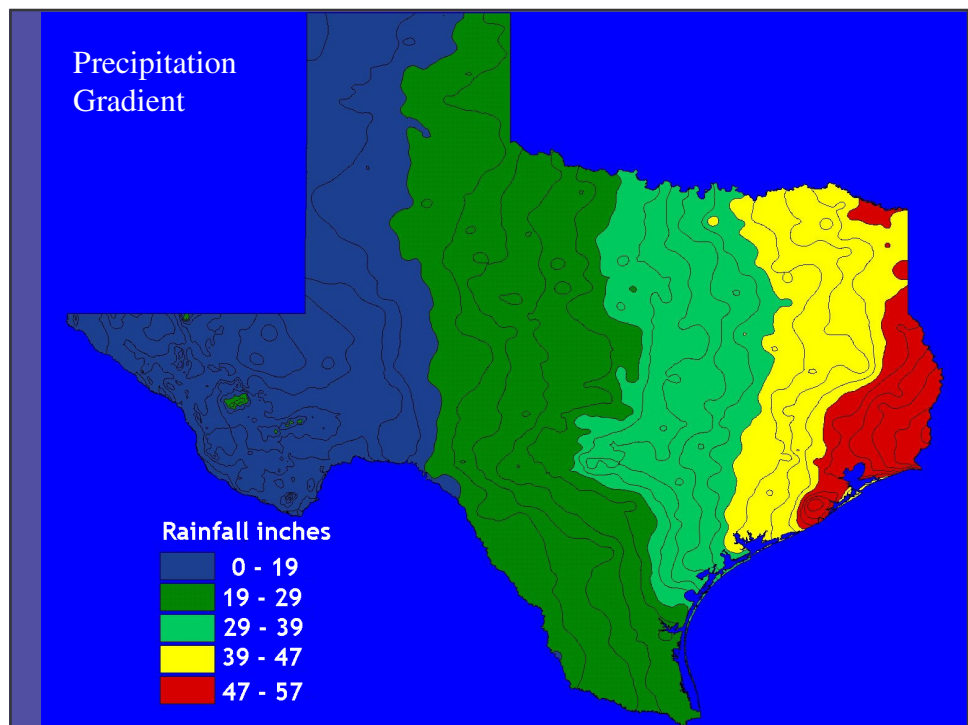
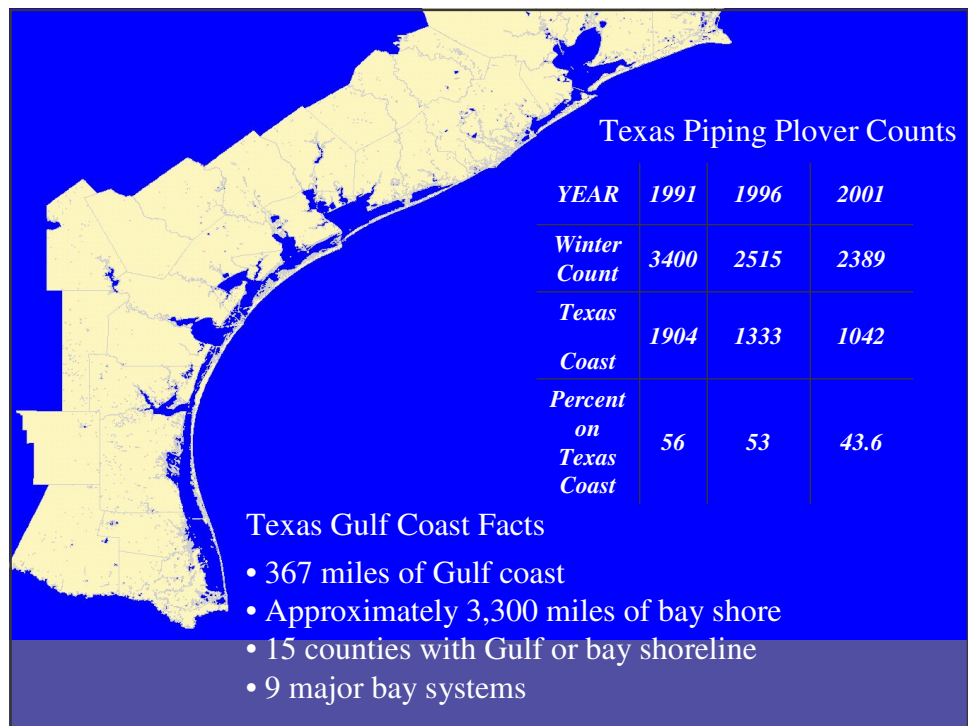
Overview of Piping Plovers
on the Texas Coast:
Summary of Distribution,
Abundance and Habitat Information

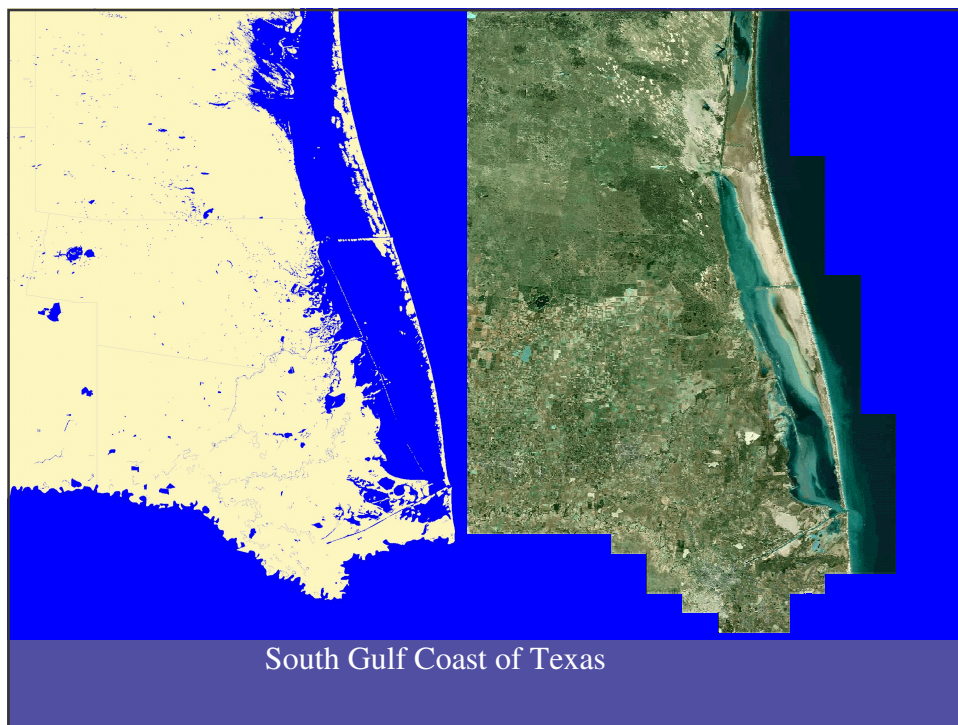
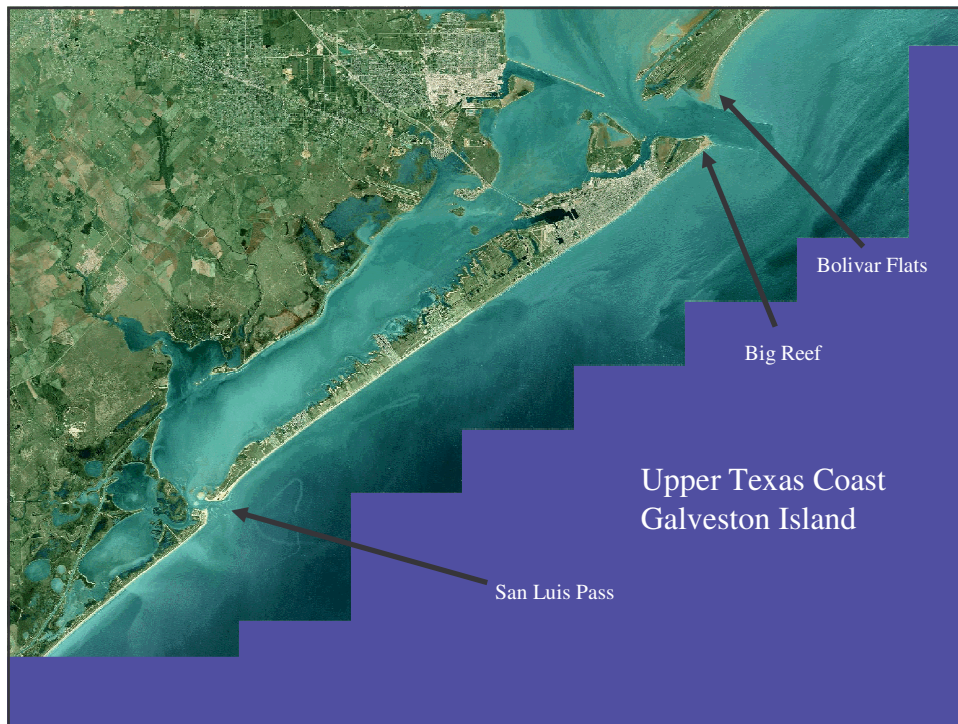


Robyn Cobb, Tom Shearer, and Pat Clements
U.S. Fish and Wildlife Service

Points of interest

- Overview of programs for Piping Plovers in Texas
- Areas with sufficient survey coverage
- Areas with potential but inadequately surveyed
- Databases
- Ongoing surveys
- Seasonal use
- Information on banded birds
- Perceived threats
- Proposed research







Upper Coast Marsh



Middle Coast Algal Mat



Land Cut



South Padre Island bayside habitat



Texas Gulf Beaches

Programs / Projects directed at Piping Plovers in Texas

Texas Parks & Wildlife Department (TPWD)

Currently:

Drafting SWG Comprehensive Wildlife Conservation Plan
Consideration for plovers & habitat protection during review of CWA Sect 404 projects

Past Efforts:

Survey & mapping of plover presence along bay shoreline
Section-6 funded research projects – carried out and/or funded by TPWD
Participation in 3 international censuses
Participation – national & regional shorebird conservation planning

U.S. Fish & Wildlife Service (USFWS)

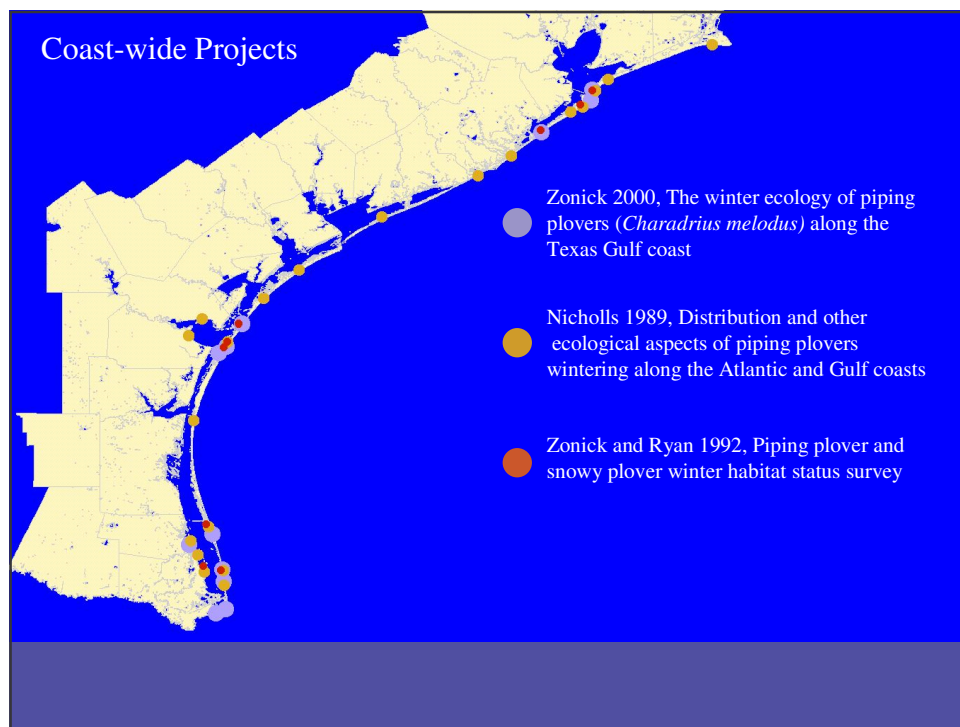
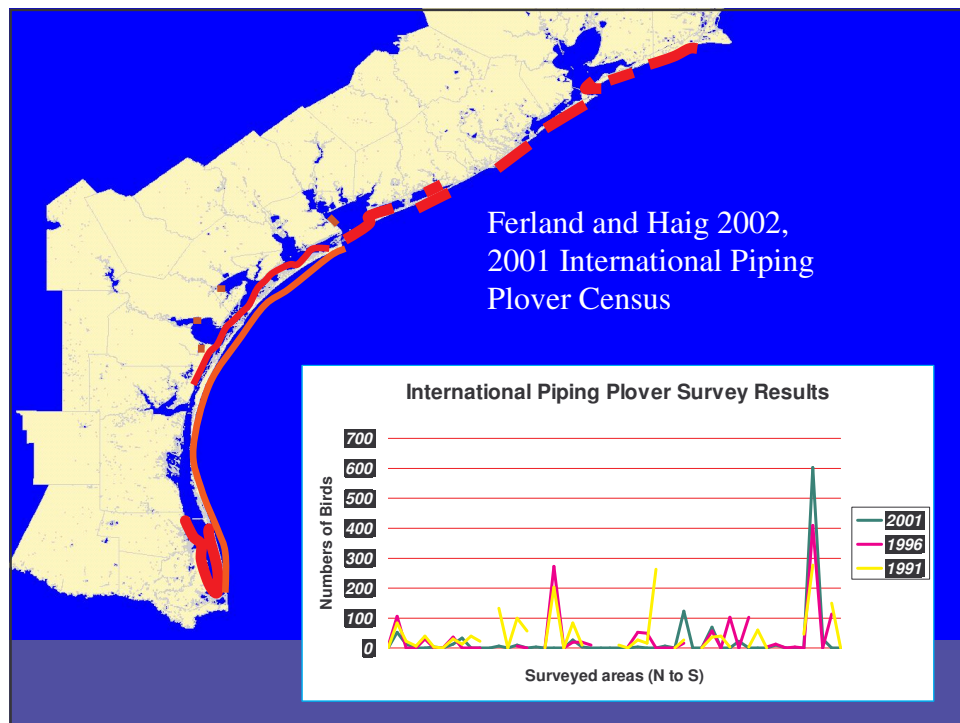
Coordination - 3 international censuses
Compilation of information used to designate Critical Habitat units
Technical assistance, some financial assistance, to various research projects
Consideration for plovers & habitat protection during review of CWA Sect 404 projects & other Federal projects

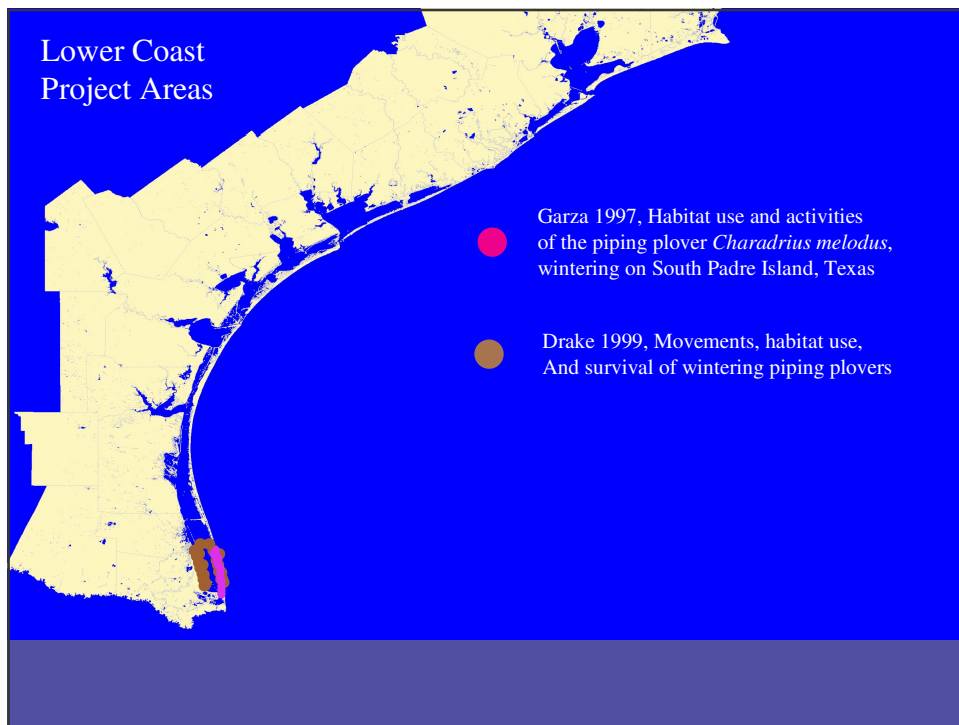
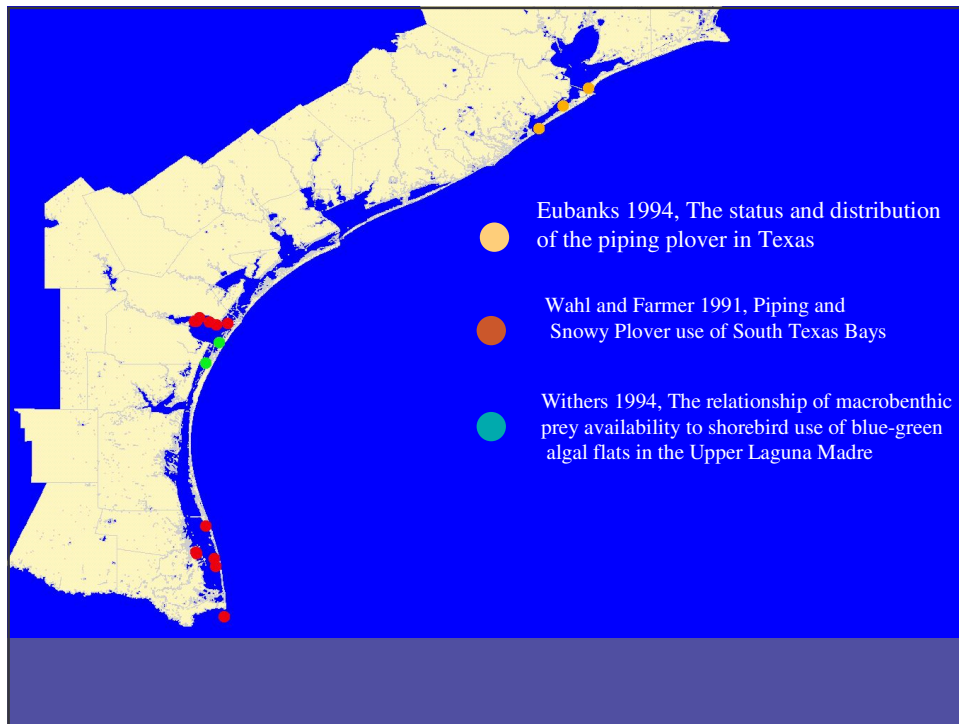
Monitoring Efforts

Several on Texas Central Coast and one on Bolivar Flats

Research Projects:

MS Theses and Dissertations





Methods:

Research Projects

Investigations of: Habitat characteristics, habitat use, winter ecology – time budgets, prey availability and preferences, effects of disturbance, home range, movements within a bay system, etc.

Methods & Techniques: Varied – include radio-tracking, color banding, sampling of benthos, tracking time budgets, comparisons between use of Gulf beaches & bay shore habitats, etc.

Frequency: Same areas repeatedly sampled – some multi-year

Surveys & Monitoring Projects

Determined distribution and abundance along stretches of Gulf beach and/or bay shore habitat

Methods & Techniques: Observations from vehicles, ATV's, boats or by walking area of interest. One multi-year effort to survey some hard-to-access bayside habitat used airboat

Frequency:

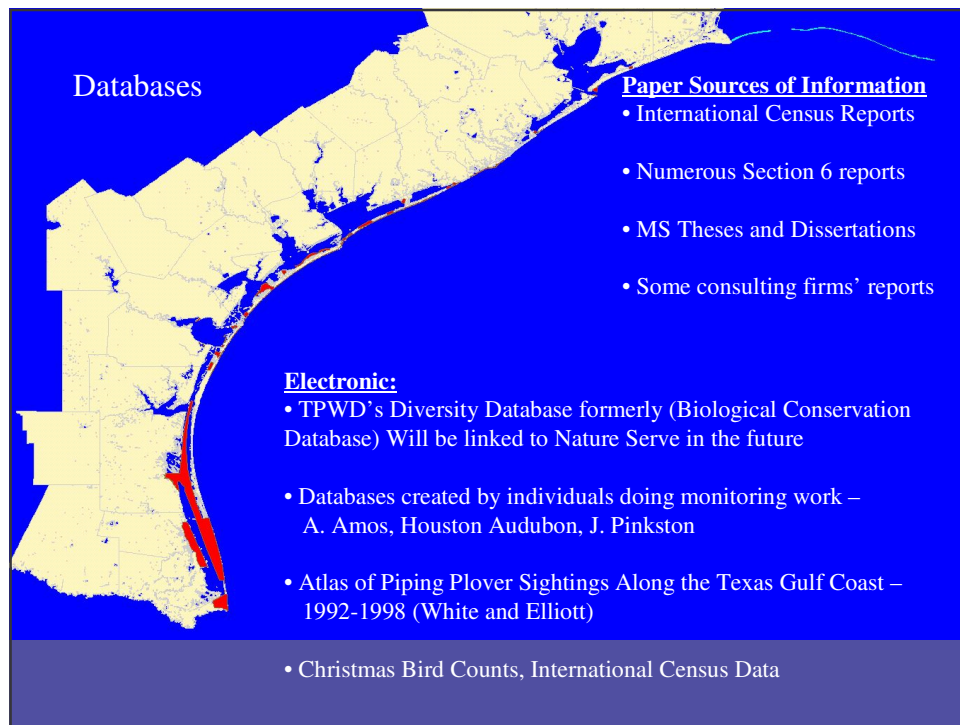
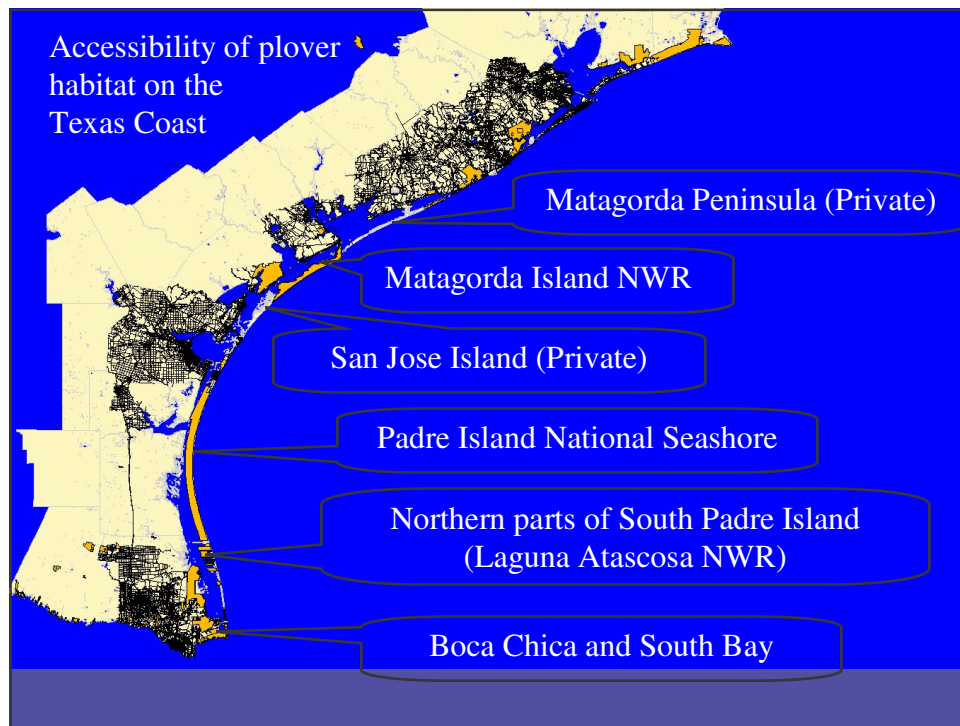
Some were a "snapshot in time" of a given area

International censuses – snapshot in time approach – however, are repeated on 5-year basis

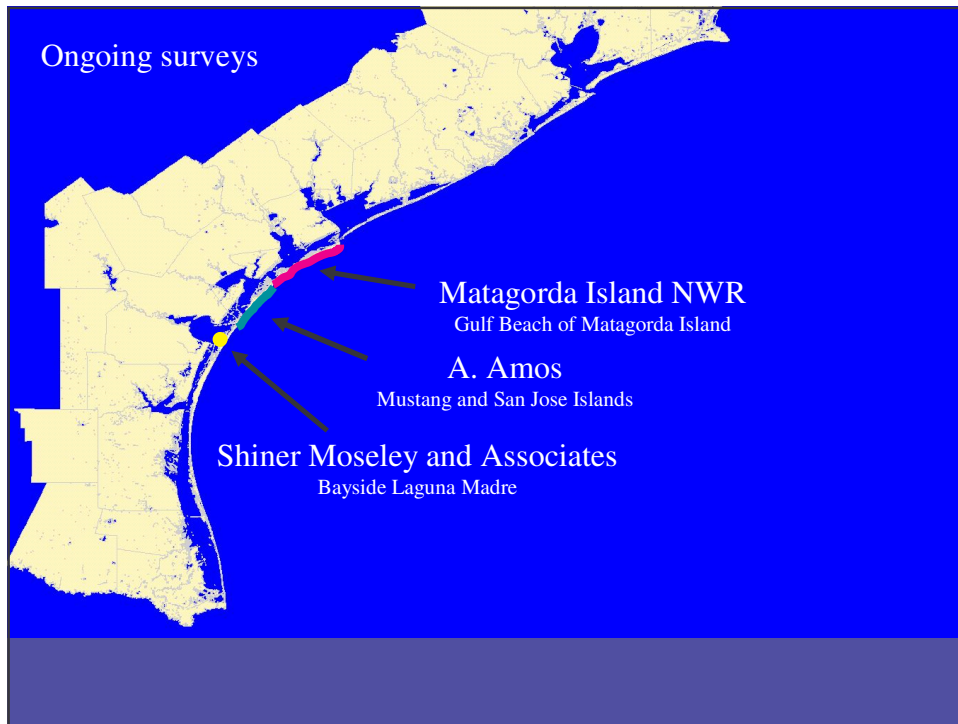
Some sites repeatedly surveyed over a time period varying from a few years to many years.

Some sites surveyed on a regular basis, but only for a season or a year.

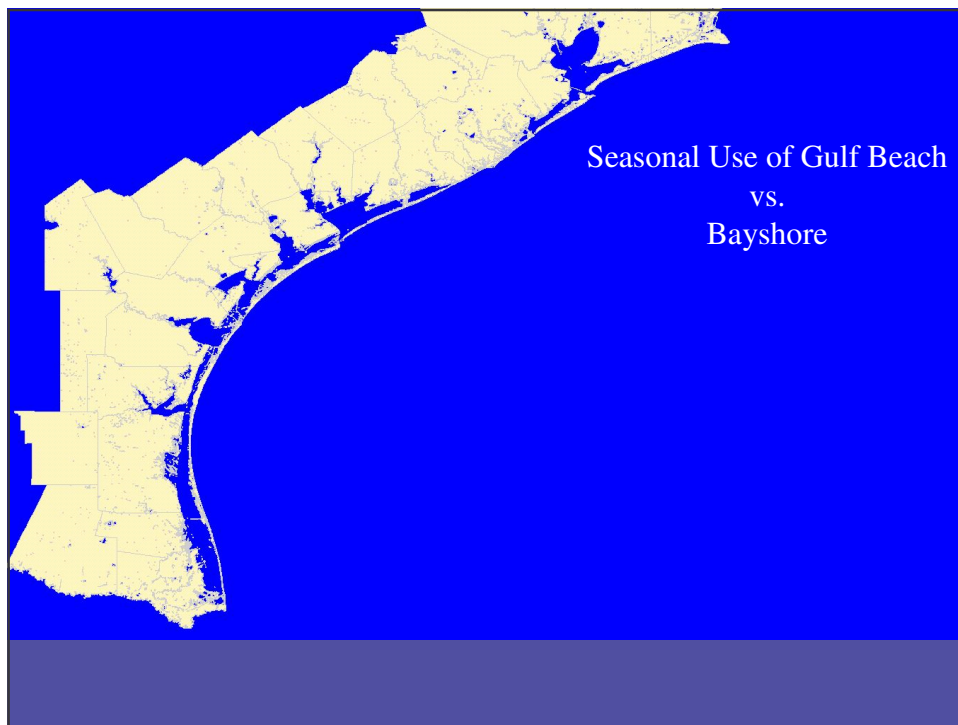


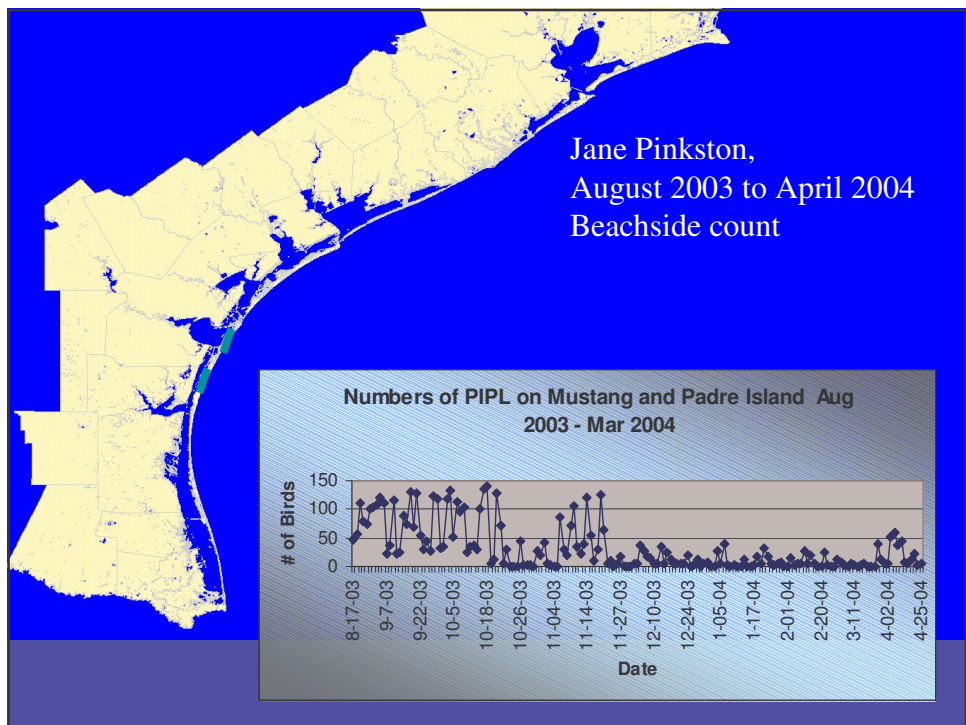
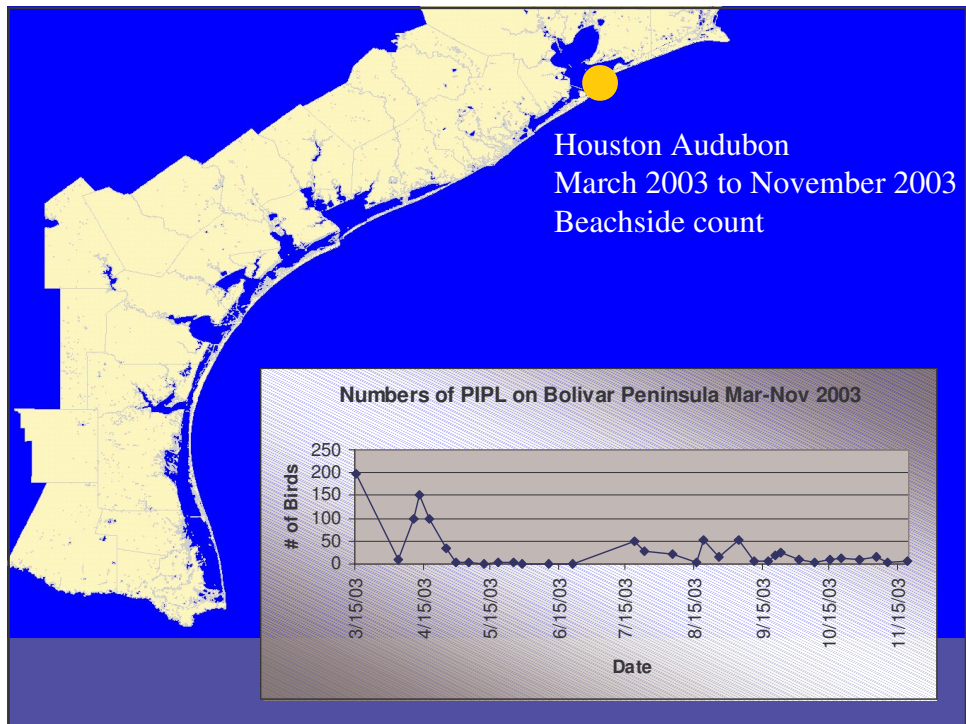


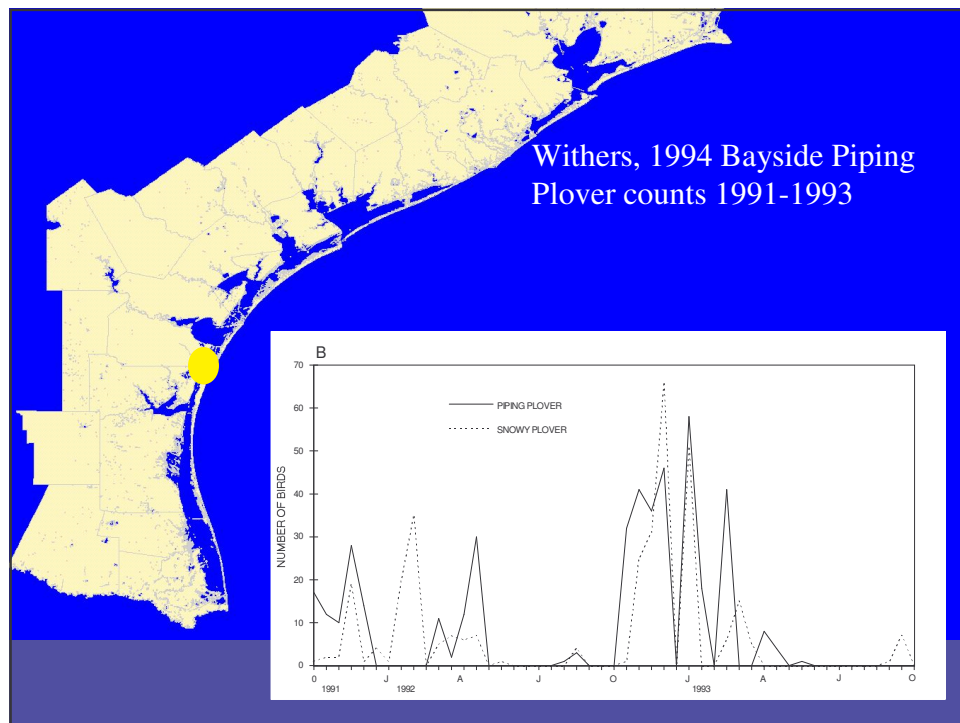
Ongoing surveys



Seasonal Use of Gulf Beach
vs.
Bayshore

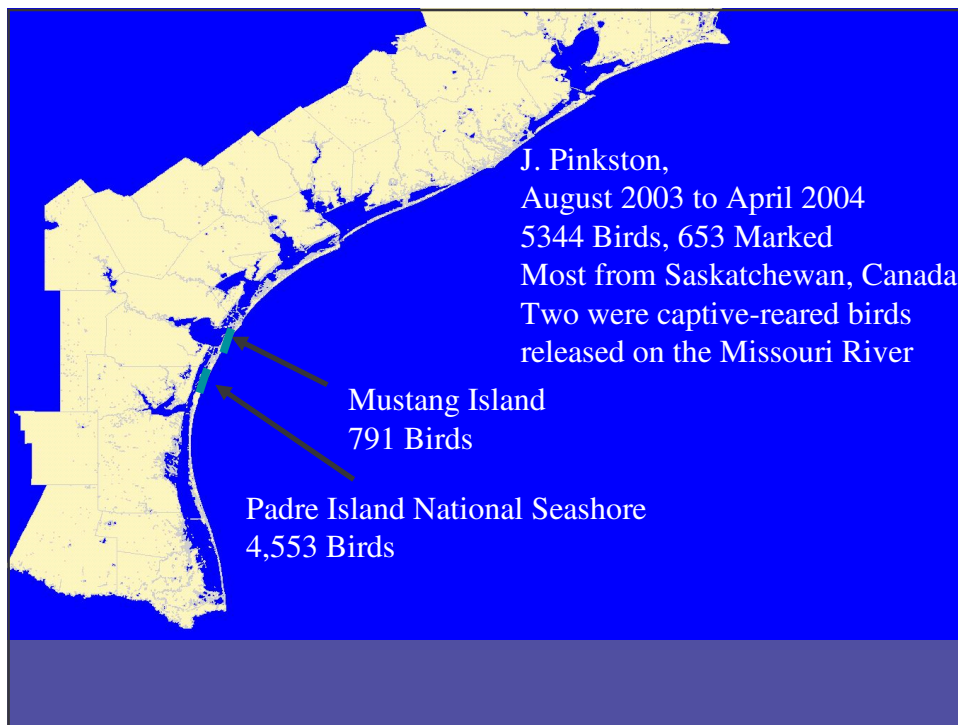
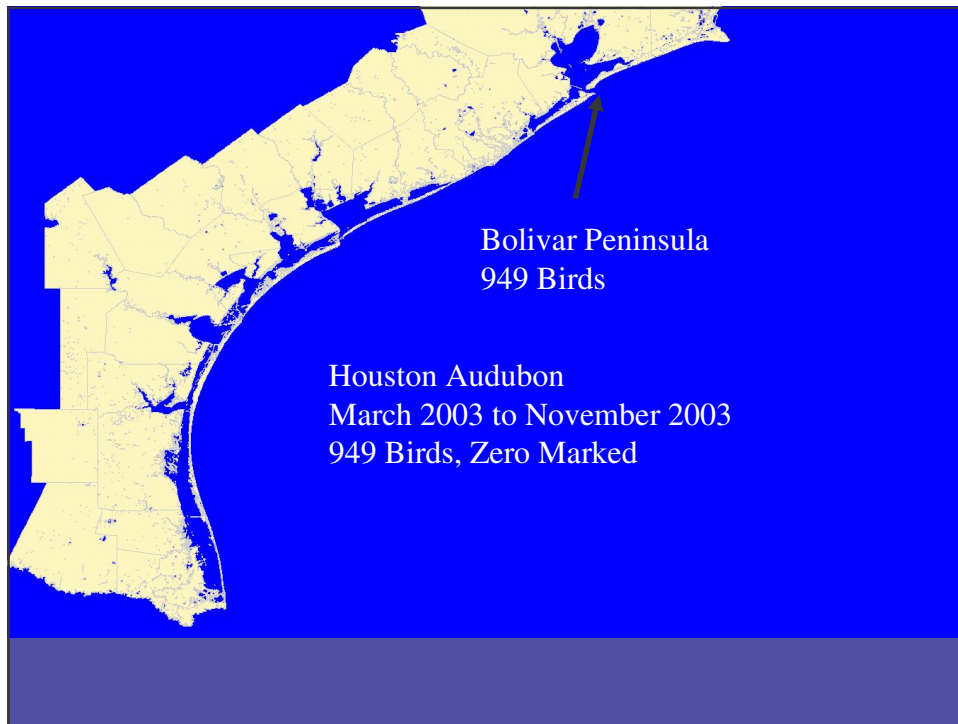


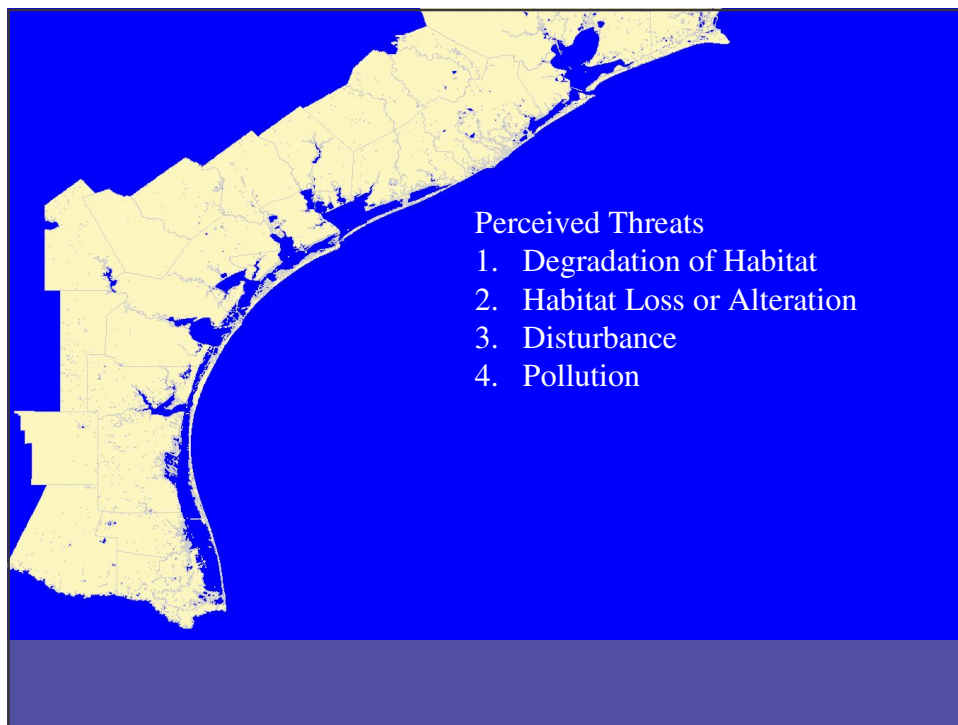
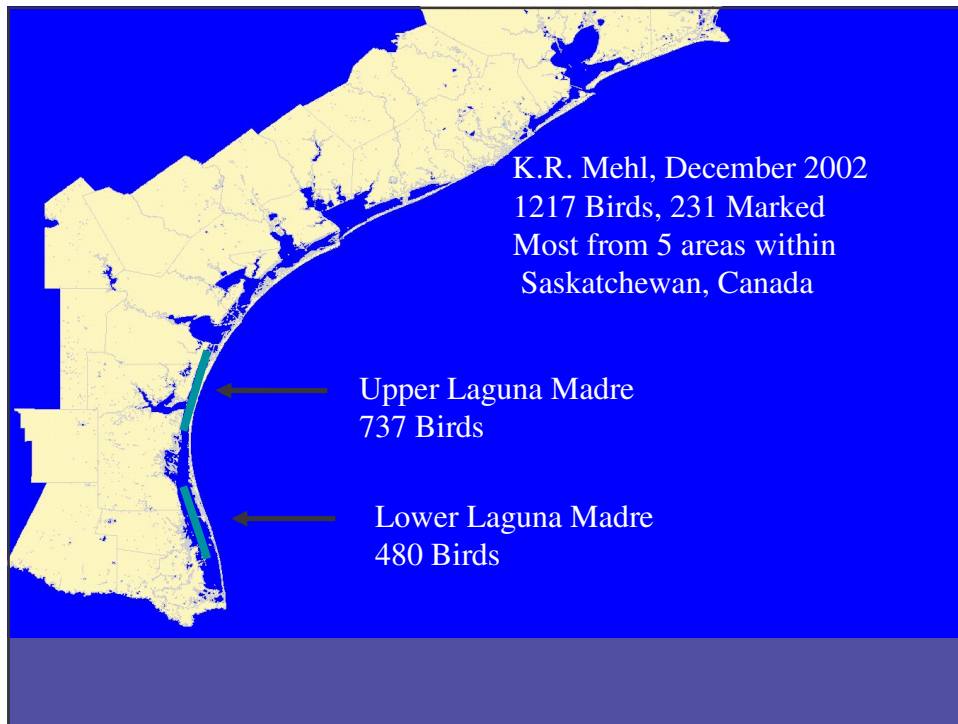


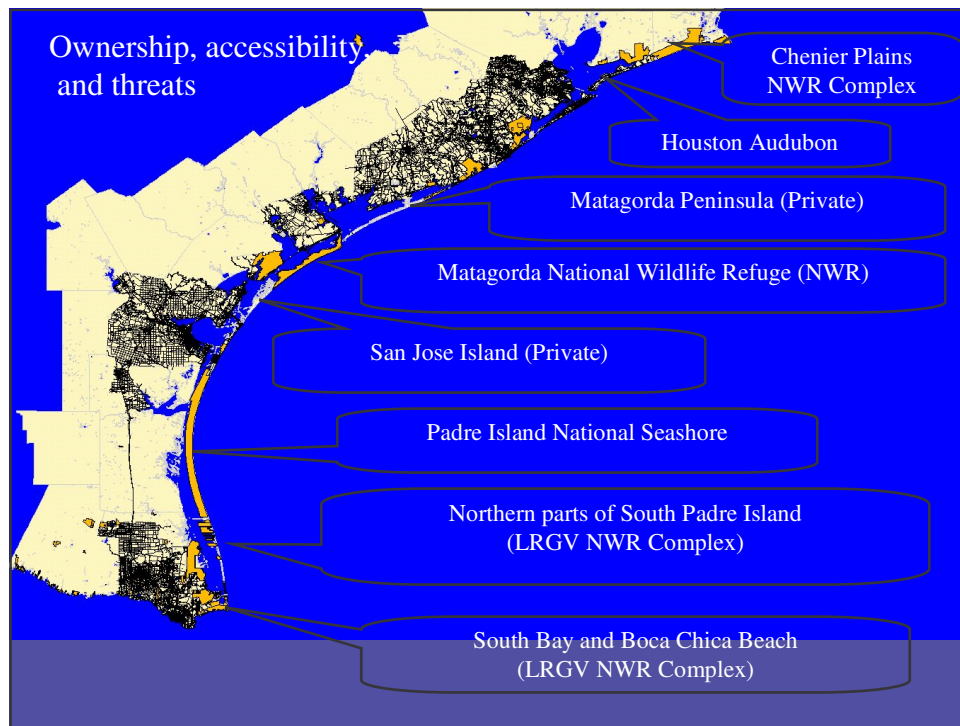


Banded Plovers





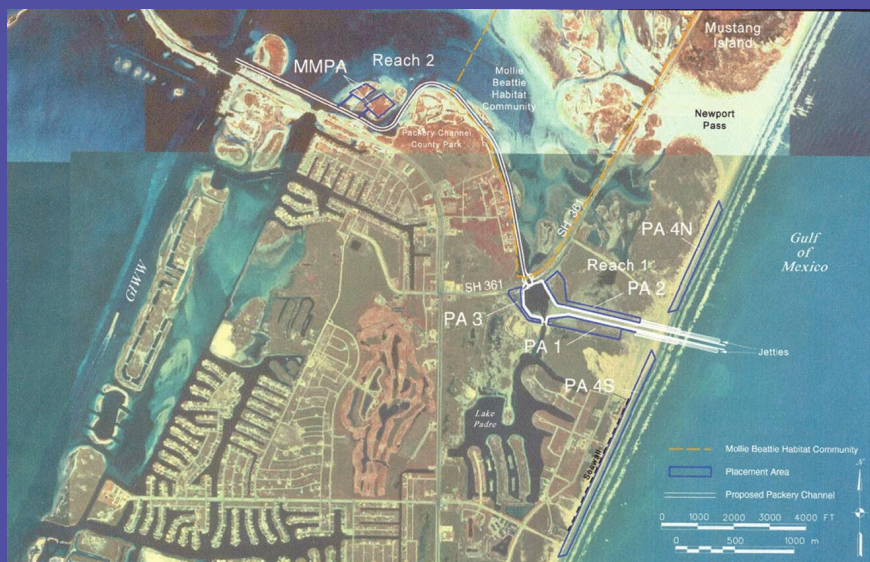




Erosion Fencing, Geotubes, Beach Renourishment



Beach cleaning



Engineering projects (Packery Channel)



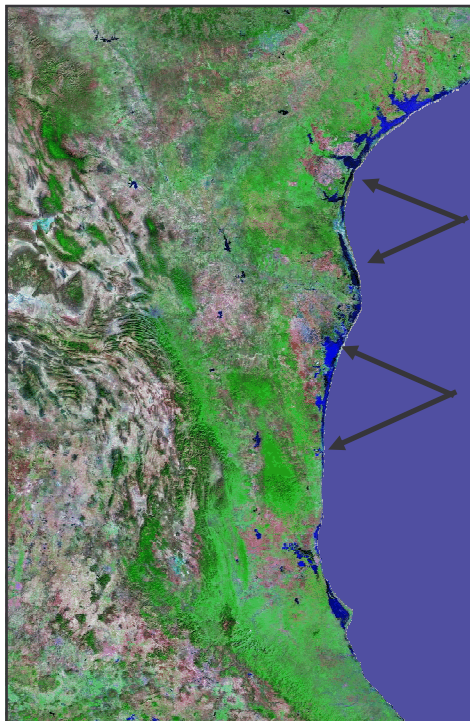
Commercial and residential development in tidal flat habitat



Canal subdivision in bayside habitat



Beach Visitors



Proposed Research Projects

Padre Island National Seashore

Implementation Plan for determining seasonal movements, habitat use, and abundance of piping plovers at Padre Island National Seashore

Pronatura

Determine abundance, distribution, habitat use and threats to piping plovers in the Laguna Madre de Tamaulipas. Proposed conservation strategies for piping plovers in the Laguna Madre Natural Protected Area



I'm A Snowy Plover Now!